WHAT IS CLAIMED IS:

1. A system for transferring a known infinity homography, comprising:

an image processor processing an image sequence, wherein the image processor:

selects an image pair from the image sequence, the selected image pair including one of two images to which the known infinity homography applies and an additional image; and

derives an infinity homography for the selected image pair from the known infinity homography.

2. The system according to claim 1, wherein the image processor, in deriving the infinity homography for the selected image pair, determines intermediate transfer parameters for a homography for the selected image pair.

3. The system according to claim 2, wherein the image processor determines a scalar multiple for the homography for the selected image pair and a vector multiple of epipoles for the selected image pair.

4. The system according to claim 1, wherein the additional image is sequential within the image sequence to one of the two images to which the known infinity homography applies.

5. The system according to claim 1, wherein the two images to which the known infinity homography applies are consecutive images within the image sequence.

6. The system according to claim 1, wherein the two images to which the known infinity homography applies are consecutive images i,j within the image sequence, the additional image is image k consecutive with images i,j within the image sequence, wherein the image processor solves $c_{jk}[e_{ik}]_{\times} H_{jk} + [e_{ik}]_{\times} e_{jk} z_{jk}^{T} = c_{ik} F_{ik} H_{ij\infty}^{-1}$, where H_{jk} is a homography for images j,k, c_{jk} is a scalar multiple for the homography H_{jk}, e_{jk} are epipoles for images j,k, z_{jk}^{T} is a transpose of an unknown vector multiple for the epipoles e_{jk}, $[e_{ik}]_{\times}$ is derived from the epipoles e_{ik} for images i,k, c_{ik} is a scalar multiple for a homography H_{ik} for images i,k, F_{ik} is a fundamental matrix for images i,k, and $H_{ij\infty}^{-1}$ is an inverse of the known infinity homography.

7. The system according to claim 1, wherein the known infinity homography relates image points for the second image within the image sequence to image points for the first image within the image sequence.

8. A system for processing an image sequence, comprising:

a video system including an input for receiving the image sequence; and

an image processor within the video system processing the image sequence, wherein the image processor:

selects an image pair from the image sequence, the selected image pair including one of two images to which a known infinity homography applies and an additional image; and

derives an infinity homography for the selected image pair from the known infinity homography.

9. The system according to claim 8, wherein the image processor, in deriving the infinity homography for the selected image pair, determines intermediate transfer parameters for a homography for the selected image pair.

10. The system according to claim 9, wherein the image processor determines a scalar multiple for the homography for the selected image pair and a vector multiple for epipoles for the selected image pair.

11. The system according to claim 8, wherein the additional image is sequential within the image sequence to one of the two images to which the known infinity homography applies.

12. The system according to claim 8, wherein the two images to which the known infinity homography applies are consecutive images within the image sequence.

13. The system according to claim 8, wherein the two images to which the known infinity homography applies are consecutive images i,j within the image sequence, the additional image is image k consecutive with images i,j within the image sequence, wherein the image processor solves $c_{jk}[e_{ik}]_\times H_{jk} + [e_{ik}]_\times e_{jk} z_{jk}^T = c_{ik} F_{ik} H_{ij\infty}^{-1}$, where H_{jk} is a homography for images j,k, c_{jk} is a scalar multiple for the homography H_{jk}, e_{jk} are epipoles for images j,k, z_{jk}^T is a transpose of an unknown vector vector multiple for the epipoles e_{jk}, $[e_{ik}]_\times$ is derived from the epipoles e_{ik} for images i,k, c_{ik} is a scalar multiple for a homography H_{ik} for images i,k, F_{ik} is a fundamental matrix for images i,k, and $H_{ij\infty}^{-1}$ is an inverse of the known infinity homography.

14. The system according to claim 8, wherein the known infinity homography relates image points for the second image within the image sequence to image points for the first image within the image sequence.

15. A method for transferring a known infinity homography for two images within an image sequence to other image pairs within the image sequence, comprising:

selecting an image pair from the image sequence, the selected image pair including one of the two images to which the known infinity homography applies and an additional image; and

deriving an infinity homography for the selected image pair from the known infinity homography.

16. The method according to claim 15, wherein the step of deriving an infinity homography for the selected image pair from the known infinity homography further comprises:

determining intermediate transfer parameters for a homography for the selected image pair.

17. The method according to claim 16, wherein the step of determining intermediate transfer parameters for a homography for the selected image pair further comprises:

determining a scalar multiple for the homography for the selected image pair and a vector multiple for epipoles for the selected image pair.

18. The method according to claim 15, wherein the step of selecting an image pair from the image sequence further comprises:

selecting the additional image from images sequential within the image sequence to one of the two images to which the known infinity homography applies.

19. The method according to claim 15, wherein the two images to which the known infinity homography applies are consecutive images within the image sequence.

20. The method according to claim 15, wherein the two images to which the known infinity homography applies are consecutive images i,j within the image sequence, the additional image is image k consecutive with images i,j within the image sequence, and wherein the step of deriving an infinity homography for the selected image pair from the known infinity homography further comprises:

solving $c_{jk}\left[e_{ik}\right]_{\times} H_{jk} + \left[e_{ik}\right]_{\times} e_{jk} z_{jk}^{T} = c_{ik} F_{ik} H_{ij\infty}^{-1}$, where H_{jk} is a homography for images j,k, c_{jk} is a scalar multiple for the homography H_{jk}, e_{jk} are epipoles for images j,k, z_{jk}^{T} is a transpose of aan unknown vector multiple for the epipoles e_{jk}, $\left[e_{ik}\right]_{\times}$ is derived from the epipoles e_{ik} for images i,k, c_{ik} is a scalar multiple for a homography H_{ik} for images i,k, F_{ik} is a fundamental matrix for images i,k, and $H_{ij\infty}^{-1}$ is an inverse of the known infinity homography.